

# Sensors & Diagnostics

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## IN THIS ISSUE

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**Cover**  
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pp. 1827–1834.  
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**Inside cover**  
See Shalini Prasad *et al.*,  
pp. 1835–1842.  
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*Diagn.*, 2024, **3**, 1835.

## EDITORIAL

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### Introduction to Supramolecular Sensors: From Molecules to Materials

Sankarasekaran Shanmugaraju,\* Robert B. P. Elmes\*  
and Valeria Amendola\*

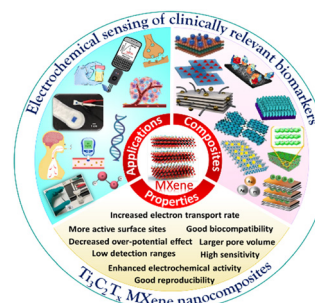


## CRITICAL REVIEWS

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### A review on $\text{Ti}_3\text{C}_2\text{T}_x$ based nanocomposites for the electrochemical sensing of clinically relevant biomarkers

Anjali Sugunan, Anusree V. Rethnakumaran  
and Mini Mol Menampambath\*



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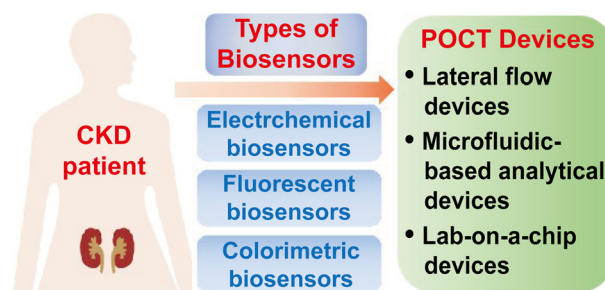


## CRITICAL REVIEWS

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## Point-of-care biosensors and devices for diagnostics of chronic kidney disease

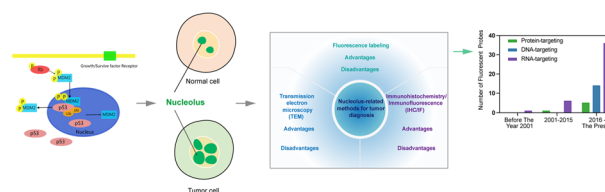
Yuan Liu,\* Xinping Zhao, Min Liao, Guoliang Ke\* and Xiao-Bing Zhang



1807

## Tumor diagnosis based on nucleolus labeling

Caiwei Jia, Jiani Gao, Dong Xie\* and Jin-Ye Wang\*

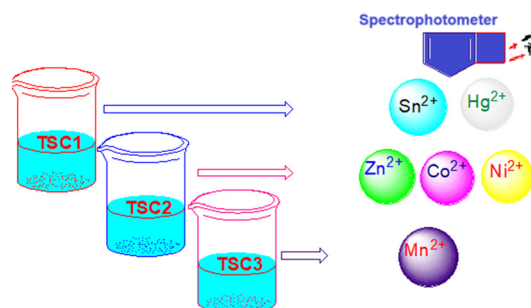


## COMMUNICATION

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## Novel thiosemicarbazone based sensors for transition metals

Repale Anil Vithal, Ram Kishore, Dongare Suvana Janardan, N. S. Chundawat, Nitin Srivastava\* and Girdhar Pal Singh\*



## PAPERS

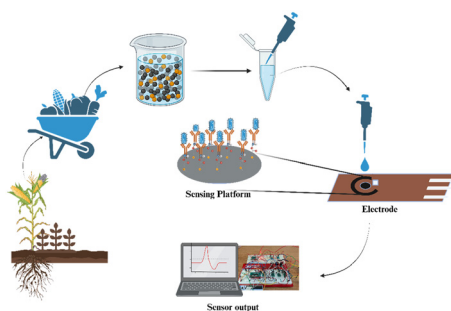
1827

## Highly sensitive flux-type non-invasive alcohol biosensor based on direct electron transfer of PQQ-dependent alcohol dehydrogenases adsorbed on carbon nanotubes

Citra Dewi Rakhmania, Yoshi Izzuddin Azhar, Kenji Shida, Erika Shinchi, Taiki Adachi, Keisei Sowa, Yuki Kitazumi, Osamu Shirai and Masato Tominaga\*



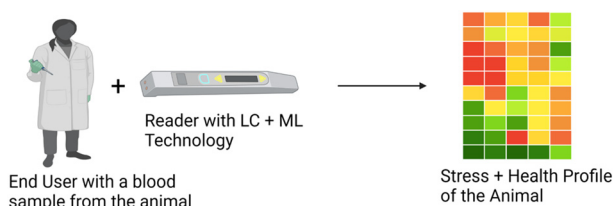
1835



### Development of a portable electrochemical sensing platform for impedance spectroscopy-based biosensing using an ARM-based microcontroller

Joseph Charles Khavul Spiro, Kundan Kumar Mishra, Vikram Narayanan Dhamu, Avi Bhatia, Sriram Muthukumar and Shalini Prasad\*

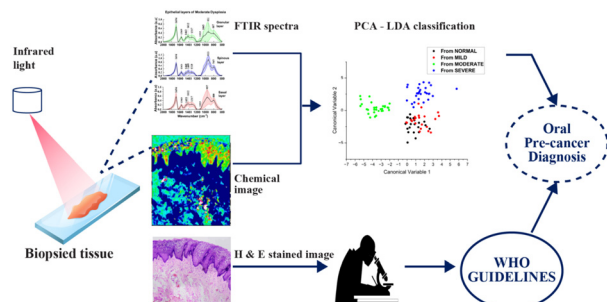
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### A liquid crystal-based biomaterial platform for rapid sensing of heat stress using machine learning

Prateek Verma, Elizabeth Adeogun, Elizabeth S. Greene, Sami Dridi, Ukash Nakarmi and Karthik Nayani\*

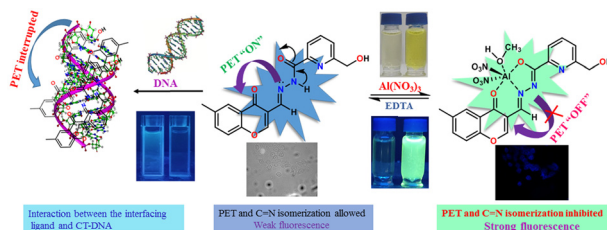
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### A comprehensive FTIR micro-spectroscopic analysis and classification of precancerous human oral tissue aided by machine learning

Pranab Jyoti Talukdar, Kartikeya Bharti, Sumita Banerjee, Sautami Basu, Sanjeet Kumar Das, Ranjan Rashmi Paul, Mousumi Pal, Mahendra Prasad Mishra, Saikat Mukherjee, Pooja Lahiri\* and Basudev Lahiri\*

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### Modulation of the binding sites for an adaptable DNA interactive probe: efficient chromo-fluorogenic recognition of $Al^{3+}$ and live cell bioimaging

Atanu Maji, Debarpan Mitra, Amitav Biswas, Moumita Ghosh, Rahul Naskar, Saswati Gharami Nabendu Murmu and Tapan K. Mondal\*

